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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,823	02/27/2001	Toshifumi Arai	503.39690X00	3739

7590 02/18/2005
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EXAMINER

LONG, HEATHER R

ART UNIT PAPER NUMBER

2615

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/763,823	ARAI ET AL.	
	Examiner	Art Unit	
	Heather R Long	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,5 and 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2001 and 01 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Taguchi et al. (U.S. Patent 5,774,602).

Regarding claims 1 and 2, Taguchi et al. discloses in Fig. 18 a pen type input device with a camera comprising a pen (86) and a camera (71) mounted on the pen (86) to pick-up an image of a penpoint, wherein the camera (71) is mounted on the pen (86) so that a central axis of the pen and an optical axis of the camera are non-co-planar (as can be seen from Fig. 18 the axis of the camera and the penpoint intersect, therefore making them non-co-planar), so that a center position of the image picked up by the camera (71) is located at left or right side of the tip end of the pen (86) (col. 6, lines 20-22; col. 14, lines 16-24). Since the camera as disclosed by Taguchi et al. is removable one could position the camera

anywhere on the pen, whether it be on the right side or the left side of the pen depends on the like of the user.

Regarding claim 3, Taguchi et al. discloses in Fig. 18 a pen type device with a camera (71) wherein the camera (71) is mounted on the pen (86) so that the camera (71) may pivot relative to the penholder within a range at least 0 to 90° (col. 6, lines 20-22; col. 14, lines 16-24). It is inherent that if the camera is removable then the camera may pivot relative to the penholder within a pivot range of at least 0 to 90°.

Allowable Subject Matter

4. Claims 4, 5, and 7-9 are allowed.
5. The following is an examiner's statement of reasons for allowance: prior art fails to teach or fairly suggest a pen type input device with a camera comprising a pen and a camera mounted on the pen to pick-up an image of a penpoint, and a an information processing apparatus to perform processing of an image picked up the camera, along with all the other elements claimed, wherein....
 - a. The information processing apparatus makes judgment of an orientation of an objective image picked up by the camera depending upon a position of a tip end of the pen in the image picked-up by the camera (claim 4).
 - b. The information processing apparatus extracts an object to be processed from an image picked up by the camera, determines a process

Art Unit: 2615

to be executed on a basis of a color of the penpoint detected from the picked-up image, and performs process of the extracted object (claim 5).

c. The information processing apparatus detects a position of the object extracted from the image picked up by the camera and the penpoint to display an image indicating pointing of the pen on the basis of the result of detection (claim 7).

d. The information processing apparatus uses an image of a standard pattern as picked-up by user pointing, to extract positioning correction values to be used to correct image pick-up during use for subsequent image pickup (claim 9).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. McWilliam et al. (U.S. Patent 6,839,453) discloses a camera (103) mounted on a pen (101), wherein the camera (103) may be angled relative to the body of the pen (101) so that the image captured by the camera (103) is centered on the selected target. The coupling may be flexible to

allow the camera (103) to be positioned. Furthermore, the position (including the orientation) of the camera (103) relative to the pen (101) may be changed, for example, to include a selected target object (e.g., the signature) within the captured image. Alternatively, the camera (103) may be fixed in a particular position in relation to the body of the pen (101). For example, the camera (103) may be fixedly oriented so as to capture an image of the tip of the pen (101). This may be accomplished by attaching the camera (103) to the pen (101) using a coupling that is flexible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R Long whose telephone number is 703-305-0681. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (703) 305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2615

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heather R Long
Examiner
Art Unit 2615

HRL
February 9, 2005


TUAN HO
PRIMARY EXAMINER